



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Sleep-Related Cognitive Arousal Across Different Insomnia Subgroups

Citation for published version:

Espie, C, Kyle, SD, Barilla, H, Macmahon, K, Gehrman, P, Corbitt, C, Henry, A & Perlis, ML 2014, 'Sleep-Related Cognitive Arousal Across Different Insomnia Subgroups', Sleep 2014, the American Academy of Sleep Medicine Annual Meeting, Minneapolis, United Kingdom, 1/06/14 - 4/06/14.

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

Publisher Rights Statement:

© Espie, C., Kyle, S. D., Barilla, H., Macmahon, K., Gehrman, P., Corbitt, C., ... Perlis, M. L. (2014). Sleep-related cognitive arousal across different insomnia subgroups. Poster session presented at Sleep 2014, the American Academy of Sleep Medicine Annual Meeting, Minneapolis, United Kingdom.

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



Sleep-related cognitive arousal across different insomnia subgroups

Kyle, S.D., Barilla, H., MacMahon, K.M., Gehrman, P., Corbitt, C., Henry, A., Perlis, M.L. Espie, C.A.

Introduction: While it is well known that Psychophysiological Insomnia is characterised by increased sleep effort, dysfunctional beliefs and attitudes towards sleep and heightened pre-sleep cognitive arousal, it is not clear how psychiatric comorbidity and history may impact sleep-related cognitions.

Methods: In the present study we compared four well-defined groups (Psychophysiological Insomnia [PI, n=51], Insomnia with Remitted Recurrent Depression [I-RRD, n=45], Insomnia comorbid with Major Depression [I-MD, n=33], and Good Sleepers [GS, n=41]) on the Glasgow Sleep Effort Scale (GSES), Dysfunctional Beliefs and Attitudes about Sleep scale (DBAS-total), Pre-Sleep Arousal Scale (PSAS-cognitive and somatic) and the Glasgow Content of Thoughts Inventory (GCTI).

Results: Groups were similar with respect to mean age (PI=43.8yrs; I-RRD=43.2yrs; I-MD=42.1yrs; GS=40.2yrs) and gender distribution (PI=63%F; I-RRD=71%F; I-MD=67%F; GS=66%F). The three insomnia patient groups evidenced similar ISI scores (PI=17.4; I-RRD=17.4; I-MD=18.1), significantly differing from GS (2.3; p 's<.001). Scores on the GSES and PSAS-somatic subscale were similar across the three insomnia subgroups, being robustly different from controls (p <.001). Group comparisons for DBAS total, PSAS-cognitive subscale and GCTI again revealed that all groups differed from good sleepers (p 's<.001), but that both I-MD and I-RRD reported higher values relative to the PI group (p 's<.01).

Conclusion: All insomnia subgroups showed clear evidence of sleep-related cognitive arousal, sleep effort and dysfunctional beliefs and attitudes about sleep. Experiencing a current or recurrent (though presently remitted) depressive illness, in addition to persistent insomnia, was associated with enhanced pre-sleep cognitive arousal and thought content, as well as greater endorsement of dysfunctional sleep beliefs, relative to PI in isolation.

Acknowledgement: This work was funded by the National Institutes of Health (R01MH077901)